

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/594,291  
Source: IFWP  
Date Processed by STIC: 10/06/2006

# ***ENTERED***



IFWP

## RAW SEQUENCE LISTING

DATE: 10/06/2006

PATENT APPLICATION: US/10/594,291

TIME: 10:47:14

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\10062006\J594291.raw

```

3 <110> APPLICANT: Auckland UniServices Limited
4     Langley, Ries
5     Fraser, John
7 <120> TITLE OF INVENTION: SET1 Proteins and Uses Therefor
9 <130> FILE REFERENCE: SHR504430/142
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/594,291
C--> 11 <141> CURRENT FILING DATE: 2006-09-25
11 <150> PRIOR APPLICATION NUMBER: AU2004901570
12 <151> PRIOR FILING DATE: 2004-03-24
14 <160> NUMBER OF SEQ ID NOS: 13
16 <170> SOFTWARE: PatentIn version 3.1
18 <210> SEQ ID NO: 1
19 <211> LENGTH: 231
20 <212> TYPE: PRT
21 <213> ORGANISM: Staphylococcus aureus subsp. NCTC8325
23 <400> SEQUENCE: 1
25 Met Lys Leu Lys Thr Leu Ala Lys Ala Thr Leu Ala Leu Gly Leu Leu
26 1           5           10           15
29 Thr Thr Gly Val Ile Thr Ser Glu Gly Gln Ala Val Gln Ala Ala Glu
30           20           25           30
33 Lys Gln Glu Arg Val Gln His Leu His Asp Ile Arg Asp Leu His Arg
34           35           40           45
37 Tyr Tyr Ser Ser Glu Ser Phe Glu Tyr Ser Asn Val Ser Gly Lys Val
38           50           55           60
41 Glu Asn Tyr Asn Gly Ser Asn Val Val Arg Phe Asn Pro Lys Asp Gln
42 65           70           75           80
45 Asn His Gln Leu Phe Leu Leu Gly Lys Asp Lys Glu Gln Tyr Lys Glu
46           85           90           95
49 Gly Leu Gln Gly Gln Asn Val Phe Val Val Gln Glu Leu Ile Asp Pro
50           100          105          110
53 Asn Gly Arg Leu Ser Thr Val Gly Gly Val Thr Lys Lys Asn Asn Lys
54           115          120          125
57 Thr Ser Glu Thr Asn Thr Pro Leu Phe Val Asn Lys Val Asn Gly Glu
58           130          135          140
61 Asp Leu Asp Ala Ser Ile Asp Ser Phe Leu Ile Gln Lys Glu Glu Ile
62 145          150          155          160
65 Ser Leu Lys Glu Leu Asp Phe Lys Ile Arg Gln Gln Leu Val Asn Asn
66           165          170          175
69 Tyr Gly Leu Tyr Lys Gly Thr Ser Lys Tyr Gly Lys Ile Ile Ile Asn
70           180          185          190
73 Leu Lys Asp Glu Asn Lys Val Glu Ile Asp Leu Gly Asp Lys Leu Gln
74           195          200          205
77 Phe Glu Arg Met Gly Asp Val Leu Asn Ser Lys Asp Ile Arg Gly Ile

```

## RAW SEQUENCE LISTING

DATE: 10/06/2006

PATENT APPLICATION: US/10/594,291

TIME: 10:47:14

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\10062006\J594291.raw

```

78      210      215      220
81 Ser Val Thr Ile Asn Gln Ile
82 225      230
85 <210> SEQ ID NO: 2
86 <211> LENGTH: 231
87 <212> TYPE: PRT
88 <213> ORGANISM: Staphylococcus aureus
90 <400> SEQUENCE: 2
92 Met Lys Leu Lys Thr Leu Ala Lys Ala Thr Leu Ala Leu Gly Leu Leu
93 1      5      10      15
96 Thr Thr Gly Val Ile Thr Ser Glu Gly Gln Ala Val Gln Ala Ala Glu
97      20      25      30
100 Lys Gln Glu Arg Val Gln His Leu His Asp Ile Arg Asp Leu His Arg
101      35      40      45
104 Tyr Tyr Ser Ser Glu Ser Phe Glu Tyr Ser Asn Val Ser Gly Lys Val
105      50      55      60
108 Glu Asn Tyr Asn Gly Ser Asn Val Val Arg Phe Asn Pro Lys Asp Gln
109 65      70      75      80
112 Asn His Gln Leu Phe Leu Leu Gly Lys Asp Lys Glu Gln Tyr Lys Glu
113      85      90      95
116 Gly Leu Gln Gly Gln Asn Val Phe Val Val Gln Glu Leu Ile Asp Pro
117      100      105      110
120 Asn Gly Arg Leu Ser Thr Val Gly Gly Val Thr Lys Lys Asn Asn Lys
121      115      120      125
124 Thr Ser Glu Thr Asn Thr Pro Leu Phe Val Asn Lys Val Asn Gly Glu
125      130      135      140
128 Asp Leu Asp Ala Ser Ile Asp Ser Phe Leu Ile Gln Lys Glu Glu Ile
129 145      150      155      160
132 Ser Leu Lys Glu Leu Asp Phe Lys Ile Arg Gln Gln Leu Val Asn Asn
133      165      170      175
136 Tyr Gly Leu Tyr Lys Gly Thr Ser Lys Tyr Gly Lys Ile Ile Ile Asn
137      180      185      190
140 Leu Lys Asp Glu Asn Lys Val Glu Ile Asp Leu Gly Asp Lys Leu Gln
141      195      200      205
144 Phe Glu Arg Met Gly Asp Val Leu Asn Ser Lys Asp Ile Arg Gly Ile
145      210      215      220
148 Ser Val Thr Ile Asn Gln Ile
149 225      230
152 <210> SEQ ID NO: 3
153 <211> LENGTH: 231
154 <212> TYPE: PRT
155 <213> ORGANISM: Staphylococcus aureus subsp. aureus N315
157 <400> SEQUENCE: 3
159 Met Lys Leu Lys Thr Leu Ala Lys Ala Thr Leu Ala Leu Gly Leu Leu
160 1      5      10      15
163 Thr Thr Gly Val Ile Thr Ser Glu Gly Gln Ala Val His Ala Lys Glu
164      20      25      30
167 Lys Gln Glu Arg Val Gln His Leu Tyr Asp Ile Lys Asp Leu Tyr Arg
168      35      40      45

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/594,291

DATE: 10/06/2006

TIME: 10:47:14

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\10062006\J594291.raw

```

171 Tyr Tyr Ser Ser Glu Ser Phe Glu Phe Ser Asn Ile Ser Gly Lys Val
172      50                      55                      60
175 Glu Asn Tyr Asn Gly Ser Asn Val Val Arg Phe Asn Gln Glu Lys Gln
176 65                      70                      75                      80
179 Asn His Gln Leu Phe Leu Leu Gly Lys Asp Lys Asp Lys Tyr Lys Lys
180                      85                      90                      95
183 Gly Leu Glu Gly Gln Asn Val Phe Val Val Lys Glu Leu Ile Asp Pro
184                      100                      105                      110
187 Asn Gly Arg Leu Ser Thr Val Gly Gly Val Thr Lys Lys Asn Asn Lys
188                      115                      120                      125
191 Ser Ser Glu Thr Asn Thr His Leu Phe Val Asn Lys Val Tyr Gly Gly
192      130                      135                      140
195 Asn Leu Asp Ala Ser Ile Asp Ser Phe Leu Ile Asn Lys Glu Glu Val
196 145                      150                      155                      160
199 Ser Leu Lys Glu Leu Asp Phe Lys Ile Arg Lys Gln Leu Val Glu Lys
200                      165                      170                      175
203 Tyr Gly Leu Tyr Lys Gly Thr Thr Lys Tyr Gly Lys Ile Thr Ile Asn
204                      180                      185                      190
207 Leu Lys Asp Glu Lys Lys Glu Val Ile Asp Leu Gly Asp Lys Leu Gln
208                      195                      200                      205
211 Phe Glu Arg Met Gly Asp Val Leu Asn Ser Lys Asp Ile Gln Asn Ile
212      210                      215                      220
215 Ala Val Thr Ile Asn Gln Ile
216 225                      230
219 <210> SEQ ID NO: 4
220 <211> LENGTH: 231
221 <212> TYPE: PRT
222 <213> ORGANISM: Staphylococcus aureus subsp. aureus Mu50
224 <400> SEQUENCE: 4
226 Met Lys Leu Lys Thr Leu Ala Lys Ala Thr Leu Ala Leu Gly Leu Leu
227 1                      5                      10                      15
230 Thr Thr Gly Val Ile Thr Ser Glu Gly Gln Ala Val His Ala Lys Glu
231      20                      25                      30
234 Lys Gln Glu Arg Val Gln His Leu Tyr Asp Ile Lys Asp Leu Tyr Arg
235      35                      40                      45
238 Tyr Tyr Ser Ser Glu Ser Phe Glu Phe Ser Asn Ile Ser Gly Lys Val
239      50                      55                      60
242 Glu Asn Tyr Asn Gly Ser Asn Val Val Arg Phe Asn Gln Glu Lys Gln
243 65                      70                      75                      80
246 Asn His Gln Leu Phe Leu Leu Gly Lys Asp Lys Asp Lys Tyr Lys Lys
247      85                      90                      95
250 Gly Leu Glu Gly Gln Asn Val Phe Val Val Lys Glu Leu Ile Asp Pro
251      100                      105                      110
254 Asn Gly Arg Leu Ser Thr Val Gly Gly Val Thr Lys Lys Asn Asn Lys
255      115                      120                      125
258 Ser Ser Glu Thr Asn Thr His Leu Phe Val Asn Lys Val Tyr Gly Gly
259      130                      135                      140
262 Asn Leu Asp Ala Ser Ile Asp Ser Phe Leu Ile Asn Lys Glu Glu Val
263 145                      150                      155                      160

```

## RAW SEQUENCE LISTING

DATE: 10/06/2006

PATENT APPLICATION: US/10/594,291

TIME: 10:47:14

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\10062006\J594291.raw

```

266 Ser Leu Lys Glu Leu Asp Phe Lys Ile Arg Lys Gln Leu Val Glu Lys
267                               165                               170                               175
270 Tyr Gly Leu Tyr Lys Gly Thr Thr Lys Tyr Gly Lys Ile Thr Ile Asn
271                               180                               185                               190
274 Leu Lys Asp Glu Lys Lys Glu Val Ile Asp Leu Gly Asp Lys Leu Gln
275                               195                               200                               205
278 Phe Glu Arg Met Gly Asp Val Leu Asn Ser Lys Asp Ile Gln Asn Ile
279                               210                               215                               220
282 Ala Val Thr Ile Asn Gln Ile
283 225                               230
286 <210> SEQ ID NO: 5
287 <211> LENGTH: 231
288 <212> TYPE: PRT
289 <213> ORGANISM: Staphylococcus aureus subsp. aureus MW2
291 <400> SEQUENCE: 5
293 Met Lys Leu Lys Thr Leu Ala Lys Ala Thr Leu Ala Leu Gly Leu Leu
294 1                               5                               10                               15
297 Thr Thr Gly Val Ile Thr Ser Glu Gly Gln Ala Val Gln Ala Lys Glu
298                               20                               25                               30
301 Lys Gln Glu Arg Val Gln His Leu Tyr Asp Ile Lys Asp Leu His Arg
302                               35                               40                               45
305 Tyr Tyr Ser Ser Glu Ser Phe Glu Phe Ser Asn Ile Ser Gly Lys Val
306                               50                               55                               60
309 Glu Asn Tyr Asn Gly Ser Asn Val Val Arg Phe Asn Gln Glu Asn Gln
310 65                               70                               75                               80
313 Asn His Gln Leu Phe Leu Ser Gly Lys Asp Lys Asp Lys Tyr Lys Glu
314                               85                               90                               95
317 Gly Leu Glu Gly Gln Asn Val Phe Val Val Lys Glu Leu Ile Asp Pro
318                               100                              105                              110
321 Asn Gly Arg Leu Ser Thr Val Gly Gly Val Thr Lys Lys Asn Asn Gln
322                               115                              120                              125
325 Ser Ser Glu Thr Asn Thr Pro Leu Phe Ile Lys Lys Val Tyr Gly Gly
326                               130                              135                              140
329 Asn Leu Asp Ala Ser Ile Glu Ser Phe Leu Ile Asn Lys Glu Glu Val
330 145                              150                              155                              160
333 Ser Leu Lys Glu Leu Asp Phe Lys Ile Arg Gln His Leu Val Lys Asn
334                               165                              170                              175
337 Tyr Gly Leu Tyr Lys Gly Thr Thr Lys Tyr Gly Lys Ile Thr Phe Asn
338                               180                              185                              190
341 Leu Lys Asp Gly Glu Lys Gln Glu Ile Asp Leu Gly Asp Lys Leu Gln
342                               195                              200                              205
345 Phe Glu His Met Gly Asp Val Leu Asn Ser Lys Asp Ile Gln Asn Ile
346                               210                              215                              220
349 Ala Val Thr Ile Asn Gln Ile
350 225                              230
353 <210> SEQ ID NO: 6
354 <211> LENGTH: 201
355 <212> TYPE: PRT
356 <213> ORGANISM: S.aureus

```

## RAW SEQUENCE LISTING

DATE: 10/06/2006

PATENT APPLICATION: US/10/594,291

TIME: 10:47:14

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\10062006\J594291.raw

358 &lt;400&gt; SEQUENCE: 6

```

360 Lys Glu Lys Gln Glu Arg Val Gln His Leu Tyr Asp Ile Lys Asp Leu
361 1          5          10          15
364 His Arg Tyr Tyr Ser Ser Glu Ser Phe Asp Phe Ser Asn Ile Ser Gly
365          20          25          30
368 Lys Val Glu Asn Tyr Asn Gly Ser Asn Val Val Arg Phe Asn Gln Asp
369          35          40          45
372 Gly Gln Asn His Gln Leu Phe Leu Leu Gly Glu Asp Lys Ala Lys Tyr
373          50          55          60
376 Lys Gln Gly Leu Glu Gly Gln Asn Val Phe Val Val Lys Glu Leu Ile
377 65          70          75          80
380 Asp Pro Asn Gly Arg Leu Ser Thr Val Gly Gly Val Thr Lys Lys Asn
381          85          90          95
384 Asn Gln Ser Ser Glu Thr Asn Thr Pro Leu Phe Val Lys Lys Val Tyr
385          100         105         110
388 Gly Gly Asn Leu Asp Ala Ser Ile Glu Ser Phe Ser Ile Asn Lys Glu
389          115         120         125
392 Glu Val Ser Leu Lys Glu Leu Asp Phe Lys Ile Arg Gln His Leu Val
393          130         135         140
396 Lys Asn Tyr Gly Leu Tyr Lys Gly Thr Thr Lys Tyr Gly Lys Ile Thr
397 145         150         155         160
400 Phe Asn Leu Lys Asp Gly Glu Lys Lys Glu Ile Asp Leu Gly Asp Lys
401          165         170         175
404 Leu Gln Phe Glu His Met Gly Asp Val Leu Asn Ser Lys Asp Ile Gln
405          180         185         190
408 Asn Ile Ala Val Thr Leu Lys Gln Ile
409          195         200

```

412 &lt;210&gt; SEQ ID NO: 7

413 &lt;211&gt; LENGTH: 201

414 &lt;212&gt; TYPE: PRT

415 &lt;213&gt; ORGANISM: S.aureus

417 &lt;400&gt; SEQUENCE: 7

```

419 Lys Glu Lys Gln Glu Arg Val Gln His Leu Tyr Asp Ile Lys Asp Leu
420 1          5          10          15
423 His Arg Tyr Tyr Ser Ser Glu Ser Phe Glu Phe Ser Asn Ile Ser Gly
424          20          25          30
427 Lys Val Glu Asn Tyr Asn Gly Ser Asn Val Val Arg Phe Asn Gln Glu
428          35          40          45
431 Lys Gln Asn His Gln Leu Phe Leu Leu Gly Glu Asp Lys Ala Lys Tyr
432          50          55          60
435 Lys Gln Gly Leu Gln Gly Gln Asp Val Phe Val Val Lys Glu Leu Ile
436 65          70          75          80
439 Asp Pro Asn Gly Arg Leu Ser Thr Val Gly Gly Val Thr Lys Lys Asn
440          85          90          95
443 Asn Gln Ser Ser Glu Thr Asn Ile His Leu Leu Val Asn Lys Leu Asp
444          100         105         110
447 Gly Gly Asn Leu Asp Ala Thr Asn Asp Ser Phe Leu Ile Asn Lys Glu
448          115         120         125
451 Glu Val Ser Leu Lys Glu Leu Asp Phe Lys Ile Arg Lys Gln Leu Val

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/594,291

DATE: 10/06/2006

TIME: 10:47:15

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\10062006\J594291.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date